

**Notice of Allowability**

Application No.

09/704,016

Applicant(s)

BERKMAN ET AL.

Examiner

Phuoc H Nguyen

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to an amendment filed on February 4, 2005.
2. ☒ The allowed claim(s) is/are 1,3-11,14-31,34-36,40-42,45-47,50,52 *PT*.
3. ☒ The drawings filed on 01 November 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
**DAVID WILEY**  
SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2100

*Examiner's Statement of Reasons for Allowance*

1. This office action is in response to the amendment filed on February 4, 2005. Previous office action contained claims 1-52. Applicant cancelled claims 2, 12-13, 32-33, 37-39, and 51. Claims 1, 3, 8-9, 27, 34-36, 40, 47, and 50 are amended.
2. Claims 1, 3-11, 14-31, 34-36, 40-50, and 52 are allowed.
3. Claims include limitations that the prior art of record does not appear to teach or render obvious the claimed limitations as recited below.
4. The following is a statement of reasons for the indication of allowable subject matter:

The closest prior art of record are Symonds et al. (Hereafter, Symonds) U.S. Patent No. 6,039,245 and Colyer U.S. Patent 6,023,722.

With respect to claim 1, Symonds teaches a message queue management system configure to manage a plurality of queues comprising tracking, managing message states, preventing re-processing of previously processed messages, coordinating interactions among plurality of queues, performing data recovery upon failure, and providing a single point of control of plurality of queues. Colyer teaches a load balancing technique by sending requests form messaging and queuing unit to a plurality of parallel connected server units; however, the prior art of record fails to teach or suggest individually or in combination as stated "a first message queue are processed by a first available subscriber in the subscriber pool and to enable the subscribers to subscribe to at least the first message queue in parallel with subscriber not in the subscriber pool".

With respect to claim 3, Symonds teaches a message state module configured to track message states, a recording module configured to selectively retain the message state information, and an interface module configured to receive and send a plurality of type of data; however, the prior art of record fails to teach or suggest individually or in combination as stated in claim 3 “message is retained in the message queue after at least one of the plurality of message subscribers has accessed the message to permit additional access to the message and to assist in at least one of archiving the message, manually distributing the message, editing the message, or resending the message”.

With respect to claims 27 and 40, Symonds teaches processing a data object to create a corresponding message wherein the corresponding message includes the data object and message information; however, the prior art of record fails to teach or suggest individually or in combination as stated in claims 27 and 40 “the message information includes a message identifier and a message header wherein message header includes message state information for the message publisher and the at least one message subscriber”.

With respect to claims 47, Symonds teaches storing message using a queue and a queue interface module, and extending message storage. Clarke et al. (Hereafter, Clarke) U.S. patent W.O. 95/10805 teaches a method of tracking message states to enforce once-only delivery; however, the prior art of record fails to teach or suggest individually or in combination as stated in claim 47 “tracking message states, including tracking information related to message publisher states and message subscriber states, to enforce once-only delivery wherein the message publisher states include a “put”, an “unavailable”, a “revealed”, and a journalled” states.

With respect to claim 52, the prior art of record fails to teach or suggest individually or in combination as stated in claims 52 “processing the first message queue for the messages that have not been revealed: extracting path information to find message parents, inspecting the message states in second message queue, marking message parents as “done” and “revealed” and if “done” is marked, marking message parents “clean” and “deleted”. If the “done” is not marked; and marking the message in the second message queue “revealed” if there are no parents; recovering message marked “clean”, processing the second message queue to find messages that are marked “fetched” but not done, and marking the messages that are marked “fetched” but not “done” as “clean”. Claims 4-11, 14-26, 28-31, 34-36, 41-46, and 50 are allowed due to dependent claims.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuoc H Nguyen whose telephone number is 571-272-3919. The examiner can normally be reached on Monday - Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, David Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuoc H Nguyen  
Examiner  
Art Unit 2143

April 12, 2005

  
DAVID WILEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER